

What is claimed is:

1. A flow control valve comprising:

a cylindrical body having an inner space, a fluid input port,
and a fluid output port for allowing fluid to pass from the fluid
input port to the fluid output port through the inner space,

a spool fitted in the inner space of the cylindrical body to
be movable along an axis thereof for changing an opening area of
at least one of the fluid input port and the fluid output port,

a spring disposed in the inner space of the cylindrical body
for urging the spool in one direction along the axis, and

a flow by-path for connecting the input port and the output
port.

2. A flow control valve according to claim 1, wherein said flow
by-path is a groove formed on an outer periphery surface of the
cylindrical body.

3. A flow control valve according to claim 2, wherein said fluid
input port and fluid output port are provided in a sidewall of
the cylindrical body.

4. A flow control valve according to claim 3, wherein said fluid
input port and fluid output port include a plurality of input
orifices and a plurality of output orifices, respectively.

5. A flow control valve according to claim 3, wherein said spool
includes a groove portion on a periphery surface thereof for
connecting the fluid input port and the fluid output port, a
small diameter portion formed at one side thereof and
communicating with the groove portion, and a large diameter

portion formed at the other side thereof and communicating with the fluid outside the fluid output port.

- 5 6. A flow control valve according to claim 5, further comprising a plug disposed at the other side of the cylindrical body so that the spring is situated between the plug and the spool, said plug being adjustable in the axial direction of the cylindrical body for adjusting an urging force of the spring.